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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,016	02/07/2006	Richard M. Jenkins	124-1145	5225
23117	7590	08/18/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HELLNER, MARK	
			ART UNIT	PAPER NUMBER
			3663	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/565,016	Applicant(s) JENKINS ET AL.	
	Examiner Mark Hellner	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/11/2006</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 9, 10, 12, 14-17, 20 and 24-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hattori et al (JP 409021922 A).

Hattori et al disclose an optical circuit for an optical amplifier input stage comprising: a first waveguide (10) for carrying an input signal beam; a second waveguide (11) for carrying a pump beam; means (I and II) coupled to the first and second waveguides for combining the signal and pump beams; and means (12a) for coupling the combined beams into an amplifying waveguide, characterized in that the first and second waveguides are hollow core optical waveguides (line 3 of abstract).

The structure recited above reads on claim 1.

Claims 2 and 8 are taught by the waveguide manufacturing method shown by figure 1 and 3.

Claim 9 is taught by element (13).

Claim 10 is taught by element (12a).

Claim 12 is taught by element (15).

Claim 14 is taught by the structure applied to claim 1.

Claim 15 is taught by elements (13) and (14).

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Claims 16 and 17 are taught by the manufacturing process of figures 1 and 3.

Claim 20 is taught by element (15).

Claims 24-33 are taught by the method of manufacture shown by figures 1 and 3.

Claim 34 is taught by the abstract.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7, 11, 13, 18, 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al.

The waveguide disclosed by Hattori et al defines an alignment slot, and as such, suggests claim 3.

A laser source (claims 4 and 18) would have been a conventional means for pumping the waveguide (13) of Hattori et al.

A fiber attachment (claims 5, 22 and 23) would have been suggested by the fact that the amplifier of Hattori et al was intended to be coupled to a communication line.

Isolators (claims 6 and 19), filters (claim 21) and variable attenuators (claim 7) were well known components of an amplifying waveguide and, as such, would have been suggested by the waveguide of Hattori et al.

It would have been obvious to have attached element (12a) to element (13) in view of the fact that they are shown connected in figure 2, thus producing claim 11.

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Detection of input signal light (claim 13) was used at the time of the present application to provide a control signal to the pumping laser and, as such, would have been a desired modification of Hattori et al.

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 571 272 6981.

Mark Hellner

Primary Examiner

AU 3663

A handwritten signature in black ink that reads "Mark Hellner". The signature is written in a cursive style with a large, stylized "M" and "H".